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Ants, eyelashes, and the 2015 Ig Nobel Prize in Physics

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The zoo can be a source of recreation and rich scientific investigation. In this lecture, I will give an overview of my recent research with animals at the Atlanta Zoo. We will talk about how to make ant hamburgers, how eyelashes reduce evaporation of your eyes by a factor of two, and why mammals urinate for the same duration of 21 seconds. Although animal-inspired research can sound trendy, it can lead the way toward potential future directions in fluid mechanics, including the dynamics of active materials, flow through hairy surfaces, and the physics of digestion and excretion.